

WHAT IS CLAIMED IS:

1 1. A method for restoring a path in a communication system between zones
2 comprising:
3 establishing an inter-zone link with a first border node of a source zone with a second
4 border node of an adjacent destination zone;
5 identifying an inter-zone link failure between the source zone and the adjacent
6 destination zone;
7 identifying a pre-planned alternative route;
8 informing a source/destination node of the adjacent destination zone;
9 informing a node in the source zone of the preplanned alternative route; and
10 providing communication between the pre-planned alternate route between the
11 destination zone and the source zone.

1 2. The method of claim 1 further comprising:
2 routing the preplanned alternative route through a transit zone.

1 3. The method of claims 2 further comprising:
2 requesting new paths to be established between zones.

1 4. The method of claim 3 wherein the alternative route is based on class of
2 service requirements.

1 5. The method of claim 2 wherein the alternative route is based on class of
2 service requirements.

1 6. The method of claim 1 further comprising:
2 establishing new paths to be established between zones.

1 7. The method of claim 6 wherein the alternative route is based on class of
2 service requirements.

1 8. The method of claim 1 wherein the alternative route is based on class of
2 service requirements.

1 9. A network element configured to restore a path in a communication system
2 comprised of:

3 a processor configured to:

4 establish an inter-zone link with a first border node of a source zone with a
5 second border node of an adjacent destination zone;

6 identify an inter-zone link failure between the source zone and the adjacent
7 destination zone;

8 identify a pre-planned alternative route;

9 inform a source/destination node of the adjacent destination zone;

10 inform a node in the source zone of the preplanned alternative route; and

11 provide communication between the pre-planned alternate route between the
12 destination zone and the source zone.

1 10. The network element of claim 9 wherein the processor is further configured to:
2 route the preplanned alternative route through a transit zone.

1 11. The network element of claim 10 wherein the processor is further configured
2 to:
3 request new paths to be established between zones.

1 12. The network element of claim 11 wherein the alternative route is based on
2 class of service requirements.

1 13. The network element of claim 10 wherein method of claim 2 wherein the
2 alternative route is based on class of service requirements.

1 14. The network element of claim 9 wherein the processor is further configured to:
2 establish new paths to be established between zones.

1 15. The network element of claim 14 wherein the alternative route is based on
2 class of service requirements.

1 16. The network element of claim 9 wherein the alternative route is based on class
2 of service requirements.

1 17. A computer system comprising:
 2 a processor;
 3 a computer readable medium coupled to the processor; and
 4 computer code, encoded in the computer readable medium, configured to cause the
 5 processor to:
 6 establish an inter-zone link with a first border node of a source zone with a
 7 second border node of an adjacent destination zone;
 8 identify an inter-zone link failure between the source zone and the adjacent
 9 destination zone;
 10 identify a pre-planned alternative route;
 11 inform a source/destination node of the adjacent destination zone;
 12 inform a node in the source zone of the preplanned alternative route; and
 13 provide communication between the pre-planned alternate route between the
 14 destination zone and the source zone.

1 18. The computer system of claim 17 wherein the computer code is further
 2 configured to cause the processor to:
 3 route the preplanned alternative route through a transit zone.

1 19. The computer system of claim 18 wherein the computer code is further
 2 configured to cause the processor to:
 3 request new paths to be established between zones.

1 20. The computer system of claim 19 wherein the alternative route is based on
 2 class of service requirements.

1 21. The computer system of claim 18 wherein the alternative route is based on
 2 class of service requirements.

1 22. The computer system of claim 17 wherein the computer code is further
 2 configured to cause the processor to:
 3 establish new paths to be established between zones.

1 23. The computer system of claim 22 wherein the alternative route is based on
2 class of service requirements.

1 24. The computer system of claim 17 wherein the alternative route is based on
2 class of service requirements.

1 25. An apparatus for restoring a path in a communication system comprising:
2 means for establishing an inter-zone link with a first border node of a source zone
3 with a second border node of an adjacent destination zone;
4 means for identifying an inter-zone link failure between the source zone and the
5 adjacent destination zone;
6 means for identifying a pre-planned alternative route;
7 means for informing a source/destination node of the adjacent destination zone;
8 means for informing a node in the source zone of the preplanned alternative route; and
9 means for providing communication between the pre-planned alternate route between
10 the destination zone and the source zone.

1 26. The apparatus for restoring a path in a communication system of claim 25
2 further comprising:
3 means for routing the preplanned alternative route through a transit zone.

1 27. The apparatus for restoring a path in a communication system of claim 26
2 further comprising:
3 means for requesting new paths to be established between zones.

1 28. The apparatus for restoring a path in a communication system of claim 27
2 wherein the alternative route is based on class of service requirements.

1 29. The apparatus for restoring a path in a communication system of claim 26
2 wherein the alternative route is based on class of service requirements.

1 30. The apparatus for restoring a path in a communication system of claim 25
2 further comprising:
3 means for establishing new paths to be established between zones.

31. The apparatus for restoring a path in a communication system of claim 30 wherein the alternative route is based on class of service requirements.

32. The apparatus for restoring a path in a communication system of claim 25 wherein the alternative route is based on class of service requirements.

33. A computer program product, encoded in computer readable media, comprising:

- a first set of instructions, executable on a computer system, configured to establish an inter-zone link with a first border node of a source zone with a second border node of an adjacent destination zone;
- a second set of instructions, executable on the computer system, configured to identify an inter-zone link failure between the source zone and the adjacent destination zone;
- a third set of instructions, executable on the computer system, configured to identify a pre-planned alternative route;
- a fourth set of instructions, executable on the computer system, configured to inform a source/destination node of the adjacent destination zone;
- a fifth set of instructions, executable on the computer system, configured to inform a node in the source zone of the preplanned alternative route; and
- a sixth set of instructions, executable on the computer system, configured to provide communication between the pre-planned alternate route between the destination zone and the source zone.

34. The computer program product of claim 33, encoded in computer readable media, further comprising:

- a seventh set of instructions, executable on the computer system, configured to provide routing the preplanned alternative route through a transit zone.

35. The computer program product of claim 34, encoded in computer readable media, further comprising:

- an eighth set of instructions, executable on the computer system, configured to request new paths to be established between zones.

1 36. The computer program product of 35 wherein the alternative route is based on
2 class of service requirements.

1 37. The computer program product of 34 wherein the alternative route is based on
2 class of service requirements.

1 38. The computer program product of claim 33, encoded in computer readable
2 media, further comprising:
3 a ninth set of instructions, executable on the computer system, configured to establish
4 new paths to be established between zones.

1 39. The computer program product of claim 38 wherein the alternative route is
2 based on class of service requirements.

1 40. The computer program product of 33 wherein the alternative route is based on
2 class of service requirements.